AMENDMENT UNDER 37 C.F.R. § 1.116 Application No.: 10/049,670

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-55. (cancelled).

56. (currently amended): A lipid represented by the following formula (2a):

$$[TM]_{u}\text{-}(L^{4})_{v}[R^{7}]_{p}\text{-}(L^{3})_{q}\text{-}[R^{6}]_{m}\text{-}(L^{1})_{n}\text{-}[\text{-}C(R^{2})(R^{3})(R^{4})]\frac{(2a)}{2a}$$

wherein:

TM is an antibody or an antigen binding fragment or derivative thereof,

u is an integer 1 or 2,

$$L^4$$
 is $-(Alk^1)_r(X^1)_s(Alk^2)_{t^-}$,

wherein X^1 is an -0- atom; a -S- atom; -C(0)-; -C(0)0-; -C(S)-; -S(0); -S(0)₂-; -N(R⁵)-; -

 $CON(R^5) -; -OC(0)N(R^5) -; -CSN(R^5) -; -N(R^5)CO -; N(R^5)C(0)O -; -N(R^5)CS -; -S(O)N(R^5) -; -S(O)N(R^5)$

 $-S(0)_2N(R^5)$ -; $-N(R^5)S(0)$ -; $-N(R^5)S(O)_2$ -; $-N(R^5)CON(R^5)$ -; or $-N(R^5)SO_2N(R^5)$ -,

wherein R⁵ is a hydrogen atom, a straight or branched alkyl group or an -Alk¹X¹- chain;

wherein in any of the groups containing two R⁵ substituents each R⁵ may be the same or different;

wherein Alk¹ and Alk², which may be the same or different, is each an optionally substituted straight or branched C₁₋₁₀alkylene, C₂₋₁₀alkenylene or C₂₋₁₀alkynylene chain optionally interrupted or terminated by at least one carbocyclic or heterocarbocyclic groups and/or heteroatoms or heteroatom containing groups X¹; and

AMENDMENT UNDER 37 C.F.R. § 1.116 Application No.: 10/049,670

r, s, and t, which may be the same or different, is each zero or the integer 1, provided that when one of r, s or t is zero, at least one of the remainder is the integer 1__,

v is zero or the integer 1,

$$L^{1}$$
 is $-X^{1}Alk^{2}$ - or $-[X^{1}]_{2}Alk^{1}X^{1}Alk^{2}$ -,

wherein X^{l} is an -0- atom; a -S- atom; -C(0)-; -C(0)0-; -C(S)-; -S(0); -S(0)2-; -N(R⁵)-;

 $-CON(R^5)-; -OC(O)N(R^5)-; -CSN(R^5)-; -N(R^5)CO-; N(R^5)C(0)0-; -N(R^5)CS-; -S(O)N(R^5)-; -N(R^5)CO-; N(R^5)CO-; N(R^5)CO-; -N(R^5)CO-; -N(R^5)CO-;$

 $-S(0)_2N(R^5)$ -; $-N(R^5)S(0)$ -; $-N(R^5)S(0)_2$ -; $-N(R^5)CON(R^5)$ -; or $-N(R^5)SO_2N(R^5)$ -;

wherein R⁵ is a hydrogen atom, a straight or branched alkyl group or an -Alk¹X¹- chain, wherein in any of the groups containing two R⁵ substituents each R⁵ may be the same or different;

wherein Alk^1 and Alk^2 , which may be the same or different, is each an optionally substituted straight or branched C_{1-6} alkylene, C_{2-6} alkenylene or C_{2-6} alkynylene chain optionally interrupted or terminated by at least one carbocyclic or heterocarbocyclic groups and/or heteroatoms or heteroatom containing groups X^1 ,

m is an integer of from 1 to 6,

n is zero or the integer 1;

R⁷ is a hydrophilic hydrocarbon containing at least two atoms or groups capable of being solvated by water;

p is an integer of from 1 to 6;

$$L^{3}$$
 is $-X^{1}$, $-X^{1}Alk^{1}X^{1}$ - or $[X^{1}Alk^{1}]_{1}X^{1}Alk^{2}X^{1}$,

wherein X^{1} is an -0- atom; a -S- atom; -C(0)-; -C(0)0-; -C(S)-; -S(0); -S(0)2-; -N(R⁵)-;

 $-CON(R^5)$ -; $-OC(0)N(R^5)$ -; $-CSN(R^5)$ -; $-N(R^5)CO$ -; $N(R^5)C(0)O$ -; $-N(R^5)CS$ -; $-S(0)N(R^5)$ -;

 $-S(0)_2N(R^5)-; -N(R^5)S(0)-; -N(R^5)S(0)_2-; -N(R^5)CON(R^5)-; \ or \ -N(R^5)S0_2N(R^5)- \ group;$

AMENDMENT UNDER 37 C.F.R. § 1.116 Attorney Docket No.: Q68310

Application No.: 10/049,670

wherein R⁵ is a hydrogen atom, a straight or branched alkyl group or an -Alk¹X¹- chain; wherein in any of the groups containing two R⁵ substituents each R⁵ may be the same or different;

wherein Alk^1 and Alk^2 , which may be the same or different, is each an optionally substituted straight or branched C_{1-6} alkylene, C_{2-6} alkenylene or C_{2-6} alkynylene chain optionally interrupted or terminated by at least one carbocyclic or heterocarbocyclic groups and/or heteroatoms or heteroatom containing groups X^1 ;

q is zero or an integer of from 1 to 6;

R⁶ is a hydrocarbon chain;

R² is a hydrogen atom or an optionally substituted aliphatic, cycloaliphatic, heteroaliphatic, heterocycloaliphatic, aromatic or heteroaromatic group optionally containing one or more cationic centers; and

R³ and R⁴, which may be the same or different, is each an optionally substituted aliphatic, cycloaliphatic, heterocycloaliphatic, aromatic or heteroaromatic group containing one of more cationic centers or R³ and R⁴ together with the carbon atom to which they are attached form a cycloaliphatic, heterocycloaliphatic, aromatic or heteroaromatic group containing two or more cationic centers.

- 57. (canceled).
- 58. (withdrawn): The lipid according to Claim 56, wherein u is the integer 1.
- 59. (withdrawn): The lipid according to Claim 56, wherein:

Application No.: 10/049,670

v is the integer 1.

- 60. (withdrawn): The lipid according to Claim 56, wherein L⁴ is an -NHCO(Alk²)_t-group.
- 61. (previously presented): The lipid according to Claim 56, wherein R² is a hydrogen atom; and R³ and R⁴ are each Sp¹[WSp²]_bWSp³ or -Sp¹[WSp²]_bWH, wherein Sp¹, Sp² and Sp³, which may be the same or different, is each a spacer group, W is a cationic center and b is zero or an integer from 1 to 6.
- 62. (previously presented): The lipid according to Claim 61, wherein Sp¹, Sp² and Sp³ is each an optionally substituted aliphatic, cycloaliphatic, heteroaliphatic, heteroaliphatic, aromatic or heteroaromatic group.
- 63. (previously presented): The lipid according to Claim 62, wherein Sp^1 , Sp^2 and Sp^3 is each an optionally substituted C_{1-6} alkylene chain.
- 64. (previously presented): The lipid according to Claim 61, wherein W is a -NH-group.
- 65. (previously presented) The lipid according to Claim 61, wherein b is an integer of from 1 to 3.

AMENDMENT UNDER 37 C.F.R. § 1.116 Application No.: 10/049,670

66. (previously presented): The lipid according to Claim 56, wherein -C(R²)(R³)(R⁴) is -CH[Sp¹NHSp²NH₂]₂, -CH[Sp¹NHSp²NHSp²NHSp²NHSp²NHSp²NHSp²NHCH₃]₂, wherein Sp¹ is -CH₂- and each Sp² is -(CH₂)₃. or -(CH₂)₄-.

- 67. (withdrawn): The lipid according to Claim 56, wherein n in -(L¹)_n- is the integer 1.
 - 68. (canceled).
- 69. (withdrawn): The lipid according to Claim 67, wherein X^1 is a -CONH- group, Alk¹ is a -CH₂-CH₂ chain and Alk² is a -(CH₂)₄- chain, -(CH₂)₅- chain or -(CH₂)₆- chain.
 - 70. (withdrawn): The lipid according to Claim 56, wherein m is an integer 1 or 2.
- 71. (previously presented): The lipid according to Claim 56, wherein R^6 is an optionally substituted C_{10-60} aliphatic chain.
- 72. (previously presented): The lipid according to Claim 71, wherein R^6 is a linear, optionally substituted C_{16-38} alkylene chain.
- 73. (previously presented): The lipid according to Claim 56, wherein q is the integer 1 and p is the integer 1 or 2.

AMENDMENT UNDER 37 C.F.R. § 1.116 Application No.: 10/049,670

74. (canceled).

- 75. (previously presented): The lipid according to Claim 56, wherein L³ is a -NHC0-, -CONH-, -CONH(CH₂)₂NHCO-, or -[CONH(CH₂)₂-]₂NCO(CH₂)₂CONH group.
- 76. (previously presented): The lipid according to Claim 56, wherein R⁷ is a synthetic or naturally occurring polyol or a poly(alkylene oxide) or a derivative thereof.
- 77. (previously presented): The lipid according to Claim 76, wherein R⁷ is a poly(alkylene oxide) or a derivative thereof.
- 78. (previously presented): The lipid according to Claim 77, wherein R⁷ is a poly(ethylene oxide).
- 79. (withdrawn): The lipid according to Claim 59, wherein R⁵ is a methyl or ethyl group.
- 80. (withdrawn): The lipid according to Claim 67, wherein R⁵ is a methyl or ethyl group.
- 81. (previously presented): The lipid according to Claim 56, wherein R⁵ is a methyl or ethyl group.